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REMARKS

Specification Objections

The disclosure stands objected for failing to define the abbreviations "PS", "PBT", and "PET". However, Applicants respectfully submit that these abbreviations are well known to one of skill in the art and represent, respectively, polystyrene, polybutylene terephthalate, and polyethylene terephthalate as depicted at page A-12 of *Modern Plastics Encyclopedia '99*, Issue Volume 75, Number 12, Mid-November 1998. See attached. As a result, Applicants respectfully submit that these objections should be withdrawn.

Claim Rejections Under 35 U.S.C. §101 and 112, second paragraph

Claims 1-12 stand rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Particularly, the Action alleges that:

1) "characterized in that" in claims 1-12 is a relative term which renders the claim indefinite;
2) "intrinsically" is unclear in claim 1;
3) "difficult" is a relative term in claim 1 which renders the claim indefinite;
4) "the plastics system" has insufficient antecedent basis in claims 4 and 8;
5) "retained in" as used in claim 5 is unclear;
6) "the light sensitive pigments" has insufficient antecedent basis in claim 8;
7) providing for the use of laser-markable plastics in claim 11 is unclear and is not a proper process claim; and
8) "high-temperature-resistant plastic" in claim 2 is a relative term which is indefinite.

With respect to rejection grounds 4) and 7), claims 4, 8, and 11 have been amended to obviate these rejections. As such, Applicants respectfully request that these rejections be withdrawn.

Regarding the rejection grounds 1-3, 5-6, and 8, Applicants respectfully submit that the Action has failed to provide any evidence (e.g., affidavit, other patents) that the ordinary artisan would be unable to readily ascertain the metes and bounds of the claimed invention. As such, there is no prima facie case of indefiniteness for the claims subject to rejection grounds 1-3, 5-6, and 8.

Furthermore, the primary purpose of the definiteness requirement is that the claim language is clear so the public is informed of the boundaries of what constitutes infringement of the patent (M.P.E.P. §2173). The claims meet this standard by defining the subject matter with a

reasonable degree of particularly and distinctness (M.P.E.P. §2173.02) by specifying the plastics and materials comprised therein. Thus, the ordinary artisan can readily ascertain the metes and bounds of the claimed invention. If the scope of the subject matter embraced by the claims is clear, and if Applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, than the claims comply with 35 U.S.C. §112, second paragraph (M.P.E.P. §2173.04).

Consequently, because the claims are sufficiently definite, Applicants respectfully request that these rejections be withdrawn.

Claim Rejections Under 35 U.S.C. §103(a)

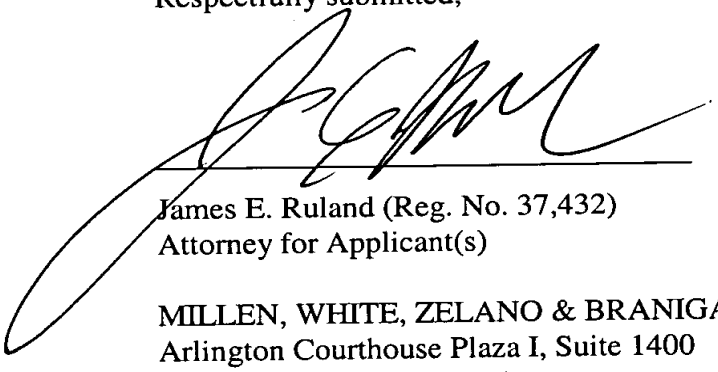
Claims 1-12 stand rejected as allegedly being unpatentable over WO 95/30716 (WO) in further view of EP 0 367 629 (EP). The Action admits WO does not disclose laser-markable plastics comprising color pigments. In addition, the Action alleges that EP discloses that plastics may include pigment. The Action concludes that it would be obvious to employ the color pigments of EP in the laser-markable plastics of WO employs light-sensitive pigments.

However, Applicants respectfully submit that the Office has the burden to establish a prima facie case of obviousness. What is more, the mere fact that references can be combined or modified does not render the resultant combination prima facie obvious unless the prior art also suggests the desirability of the combination. See *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

The Action utterly fails to provide any rationale or evidence that one of skill in the art would be motivated to combine these references. Particularly, the Action fails to cite any desirability disclosed in WO to use the color pigments of EP. Rather, WO uses metal oxides. As such, there is no desirability to combine the teachings of these references. Because the combination of references is untenable, there is no prima facie case of obviousness. As such, Applicants respectfully submit that the rejections should be withdrawn.

In view of the above remarks, favorable reconsideration is courteously requested. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned, "**VERSION WITH MARKINGS TO SHOW CHANGES MADE**". If there are any remaining issues which can be expedited by a telephone conference, the Examiner is courteously invited to telephone Counsel at the number indicated below.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claims 4, 8 and 11 has been amended as follows:

4. **(Twice Amended)** Laser-markable plastics according to Claim 1, characterized in that the proportion of the absorber material based on ~~the~~ a plastics system is 0.1 - 10% by weight.

8. **(Twice Amended)** Laser-markable plastics according to Claim 1, characterized in that the proportion of ~~the~~ light-sensitive pigments in the plastic is from 0 to 5% by weight, based on ~~the~~ a plastics system.

11. **(Amended)** ~~Use of the laser-markable plastics according to Claim 1 as material~~ A method for producing mouldings ~~which are~~ comprising marking ~~marked~~ with the aid of lasers laser-markable plastics according to Claim 1.

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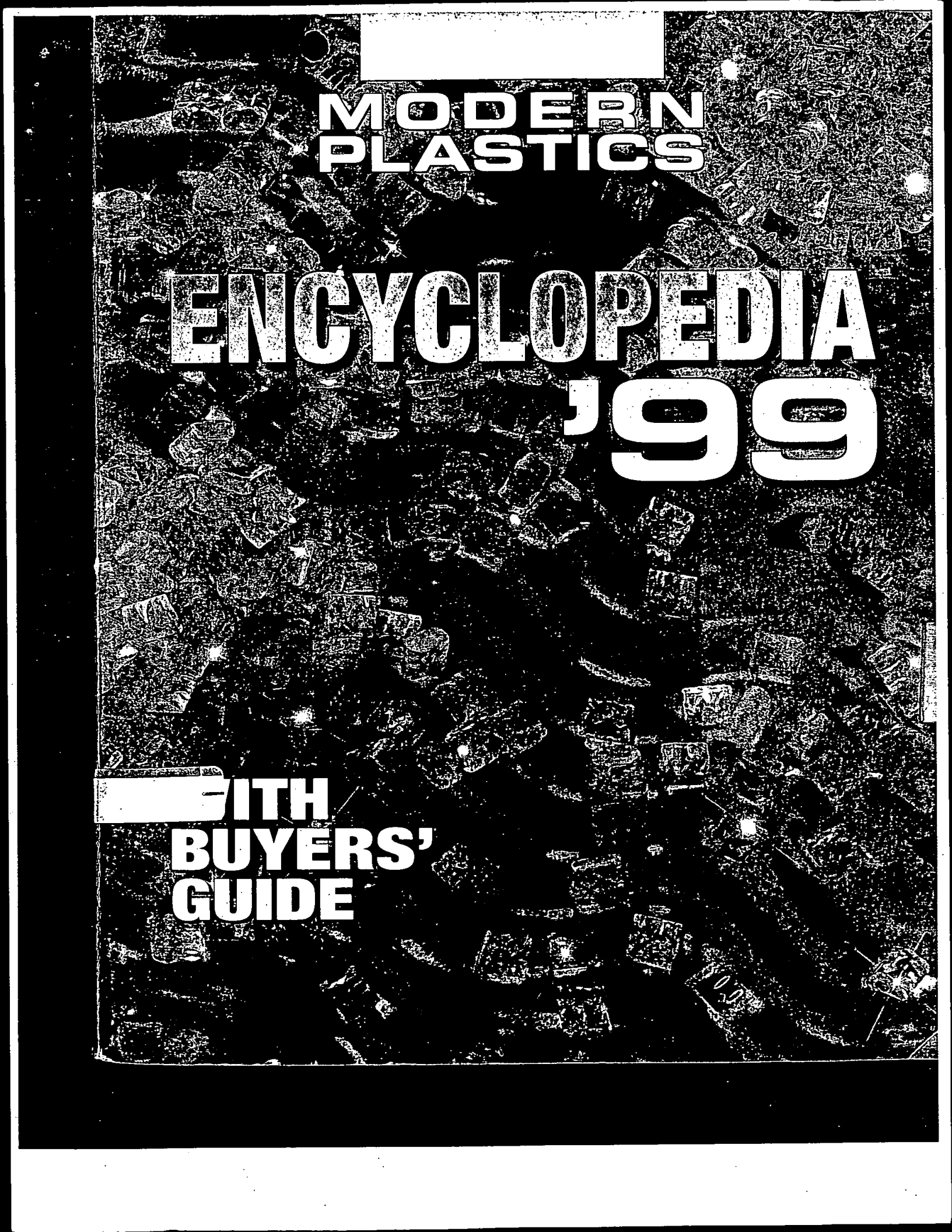
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ABBREVIATIONS

The following is a partial list of abbreviations for chemical, marketing, scientific, and technical terms that are frequently used by writers of articles in *Modern Plastics Encyclopedia*. Due to changing standards of chemical nomenclature, certain products listed here may be seen in other formats with some variation in the name.

AAGR	average annual growth rate
AS	atomic absorption spectroscopy
ABA	acrylonitrile-butadiene-acrylate
ABS	acrylonitrile-butadiene-styrene copolymer
ACM	acrylic acid ester rubber
ACS	acrylonitrile-chlorinated PE-styrene
AES	acrylonitrile-ethylene-propylene-styrene
AMMA	acrylonitrile-methyl methacrylate
AN	acrylonitrile
AO	antioxidant
APET	amorphous polyethylene terephthalate
APP	atactic polypropylene
ASA	acrylic-styrene-acrylonitrile
ASTM	American Society for Testing and Materials
ATH	aluminum trihydrate
AZ(O)	azodicarbonamide
BATF	Bureau of Alcohol, Tobacco, and Firearms
BM	blow molding
BMC	bulk molding compounds
BMI	bismaleimide
BO	biaxially-oriented (film)
BOPP	biaxially-oriented polypropylene
BR	butadiene rubber
BS	butadiene styrene rubber
CA	cellulose acetate
CAB	cellulose acetate butyrate
CAD	computer aided design
CAE	computer aided engineering
CAM	computer aided manufacturing
CAP	cellulose acetate propionate
CAP	controlled atmosphere packaging
CBA	chemical blowing agent
CF	cresol formaldehyde
CFA	chemical foaming agent
CFC	chlorofluorocarbons
CFR	Code of Federal Regulations
CHDM	cyclohexanedimethanol
CIM	computer integrated manufacturing
CN	cellulose nitrate
COP	copolyester
COPA	copolyamide
COPE	copolyester
CP	cellulose propionate
CPE	chlorinated polyethylene
CPET	crystalline polyethylene terephthalate
CPP	cast polypropylene
CPVC	chlorinated polyvinyl chloride
CR	chloroprene rubber
CS	casein
CSD	carbonated soft drink
CTA	cellulose triacetate
CVD	chemical vapor deposition
DABCO	diazobicyclooctane
DAM	days after manufacture
DAM	diallyl maleate
DAP	diallyl phthalate
DCPD	dicyclopentadiene
DE	diotamaceous earth
DEA	dielectric analysis
DETDA	diethyltoluenediamine
DMA	dynamic mechanical analysis
DSC	differential scanning analysis
DMT	dimethyl ester of terephthalate
DWV	drain, waste, vent (pipe grade)
EAA	ethylene acrylic acid
EB	electron beam
EBA	ethylene butyl acrylate
EC	ethyl cellulose
ECTFE	ethylene-chlorotrifluoroethylene copolymer
EEA	ethylene-ethyl acrylate
EG	ethylene glycol
EMA	ethylene-methyl acrylate
EMAA	ethylene methacrylic acid
EMAC	ethylene-methyl acrylate copolymer
EMC	electromagnetic compatibility
EMI	electromagnetic interference
EMPP	elastomer-modified polypropylene
EnBA	ethylene normal butyl acrylate
EP	epoxy resin, also ethylene-propylene
EPA	Environmental Protection Agency
EPDM	ethylene-propylene terpolymer rubber
EPM	ethylene-propylene rubber
EPS	expandable polystyrene
ESCR	environmental stress crack resistance
ESI	ethylene-styrene copolymers
ETE	engineering thermoplastic elastomers
ETFE	ethylene-tetrafluoroethylene copolymer
ETP	engineering thermoplastics
EVA(C)	polyethylene-vinyl acetate
EVOH	polyethylene-vinyl alcohol copolymers
FDA	Food and Drug Administration
FEP	fluorinated ethylene propylene copolymer
FPVC	flexible polyvinyl chloride
FR	flame retardant
FRP	fiber reinforced plastic
GIM	gas injection molding
GIT	gas injection technique
GMT(P)	glass mat reinforced thermoplastics
GPC	gel permeation chromotography
GPPS	general purpose polystyrene
GRP	glass fiber reinforced plastics
GTP	group transfer polymerization
HALS	hindered amine light stabilizer
HAS	hindered amine stabilizers
HB	Brinell hardness number
HCFC	hydrochlorofluorocarbons
HCR	heat-cured rubber
HDI	hexamethylene diisocyanate
HDPE	high-density polyethylene
HDT	heat deflection temperature
HFC	hydrofluorocarbons
HIPS	high-impact polystyrene
HMDI	diisocyanato dicyclohexylmethane
HMW	high molecular weight
HNP	high nitrile polymer
IM	injection molding
IMC	in-mold coating
IMD	in-mold decoration
IPI	isophorone diisocyanate
IV	intrinsic viscosity
LCP	liquid crystal polymers
LIM	liquid injection molding
LDPE	low-density polyethylene
LLDPE	linear low-density polyethylene
LP	low-profile resin
MAP	modified atmosphere packaging
MbOCA	3,3'-dichloro-4,4-diamino-diphenylmethane
MBS	methacrylate-butadiene-styrene

ABBREVIATIONS

MC	methyl cellulose
MDI	methylene diphenylene diisocyanate
MEKP	methyl ethyl ketone peroxide
MF	melamine formaldehyde
MFI	melt flow index
MIS	management information systems
MMA	methyl methacrylate
MPE	metallocene polyethylenes
MPF	melamine-phenol-formaldehyde
MPR	melt-processable rubber
MRP	manufacturing requirement planning
MWD	molecular weight distribution
NBR	nitrile rubber
NDI	naphthalene diisocyanate
NDT	nondestructive testing
NR	natural rubber
ODP	ozone depleting potential
OFS	organofunctional silanes
OPET	oriented polyethylene terephthalate
OPP	oriented polypropylene
O-TPV	olefinic thermoplastic vulcanizate
OEM	original equipment manufacturer
OSA	olefin-modified styrene-acrylonitrile
PA	polyamide
PAEK	polyaryletherketone
PAI	polyamide imide
PAN	polyacrylonitrile
PB	polybutylene
PBA	physical blowing agent
PBAN	polybutadiene-acrylonitrile
PBI	polybenzimidazole
PBN	polybutylene naphthalate
PBS	polybutadiene styrene
PBT	polybutylene terephthalate
PC	polycarbonate
PCC	precipitated calcium carbonate
PCD	polycarbodiimide
PCR	post-consumer recyclate
PCT	polycyclohexylenedimethylene terephthalate
PCTA	copolyester of CHDM and PTA
PCTFE	polychlorotrifluoroethylene
PCTG	glycol-modified PCT copolymer
PE	polyethylene
PEBA	polyether block polyamide
PEC	chlorinated polyethylene
PEDT	3,4 polyethylene dioxithiophene
PEEK	polyetheretherketone
PEI	polyether imide
PEK	polyetherketone
PEL	permissible exposure level
PEKEKK	polyetherketoneetherketoneketone
PEN	polyethylene naphthalate
PES	polyether sulfone
PET	polyethylene terephthalate
PETG	PET modified with CHDM
PF	phenol formaldehyde
PFA	perfluoroalkoxy resin
PI	polyimide
PID	proportional, integral, derivative
PIBI	butyl rubber
PIM	powder injection molding
PLC	programmable logic controller
PMDI	polymeric methylene diphenylene diisocyanate
PMMA	polymethyl methacrylate
PMP	polymethylpentene
PO	polyolefins
POM	polyacetal
PP	polypropylene
PPA	polyphthalamide
PPC	chlorinated polypropylene
PPE	polyphenylene ether, modified
ppm	parts per million
PPO	polyphenylene oxide
PPS	polyphenylene sulfide
PPSU	polyphenylene sulfone
PS	polystyrene
PSU	polysulfone
PTA	purified terephthalic acid
PTFE	polytetrafluoroethylene
PU	polyurethane
PUR	polyurethane
PVC	polyvinyl chloride
PVCA	polyvinyl chloride acetate
PVDA	polyvinylidene acetate
PVDC	polyvinylidene chloride
PVDF	polyvinylidene fluoride
PVF	polyvinyl fluoride
PVOH	polyvinyl alcohol
QMC	quick mold change
RFI	radio frequency interference
RHDPE	recycled high density polyethylene
RIM	reaction injection molding
RPET	recycled polyethylene terephthalate
RTD	resistance temperature detector
RTM	resin transfer molding
RTV	room temperature vulcanizing
SI	silicone plastic
SAN	styrene acrylonitrile copolymer
SB	styrene butadiene copolymer
SBC	styrene block copolymer
SBR	styrene butadiene rubber
SMA	styrene maleic anhydride
SMC	sheet molding compound
SMC-C	SMC-continuous fibers
SMC-D	SMC-directionally oriented
SMC-R	SMC-randomly oriented
SPC	statistical process control
SQC	statistical quality control
SRIM	structural reaction injection molding
TA	terephthalic acid
TDI	toluene diisocyanate
TEO	thermoplastic elastomeric olefin
TGA	thermogravimetric analysis
TLCP	thermoplastic liquid crystal polymer
TMA	thermomechanical analysis
TMC	thick molding compound
T/N	terephthalate/naphthalate
TPA	terephthalic acid
TP	thermoplastic
TPE	thermoplastic elastomer
TPO	thermoplastic olefins
TPU	thermoplastic polyurethane
TPV	thermoplastic vulcanizate
TS	thermoset
TWA	time-weighted average
UF	urea formaldehyde
UHMW	ultrahigh molecular weight
ULDPE	ultralow-density polyethylene
UP	unsaturated polyester resin
UR	urethane
UV	ultraviolet
VA(C)	vinyl acetate
VC	vinyl chloride
VDC	vinylidene chloride
VLDPE	very low-density polyethylene
VOC	volatile organic compounds
ZNC	Ziegler-Natta catalyst